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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,149	09/10/2003	Christopher J. Nagel	27151.2001-US3	4820

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EXAMINER	
KOPEC, MARK T	

ART UNIT	PAPER NUMBER
1751	

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/659,149	NAGEL, CHRISTOPHER J.	
	Examiner	Art Unit	
	Mark Kopec	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-13 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 10 September 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

This application is a DIV of S.N. 10/123,028 (filed 4/12/02), which application is a CIP of S.N. 09/416,720 (filed 10/13/99, now U.S. 6,572,792). Claims 1-13 are currently pending.

Applicant's election without traverse of Group 11 metals in the reply filed on 2/2/05 is acknowledged.

Upon careful consideration, the species requirement imposed 12/27/04 is **withdrawn**.

Applicant should provide copies of any declarations/affidavits filed in the parent/copending applications so that such may be formally made of record in the instant application.

The disclosure is objected to because of the following informalities:

It appears that the drawing description at pages 34 and 37 (of the specification) refer to the wrong drawing figures. For example, the description at page 34 (results of Figures 26 and 27) should recite Figures 25 and 26.

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple

assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-1 of U.S. Patent No. 6,572,792. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant claims and the "tailored copper" claims of 6,572,792 appear to be draw to copper produced by identical process.

Claims 1-13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No. 10/659,090, claims 1-5 of copending Application No. 10/690,391, and the allowed claims of 10/123,028. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the above listed instant claims and the claims of S.N.'s 10/659,090, 10/690,391 and 10/123,028 are

directed to metal(s) produced by the same process. Although the claim wording is not identical, it appears from the disclosure(s) that the claimed products are not patentably distinct.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-13 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

All of the instant claims are drawn to compositions "characterized by a calibrated Uniquant analysis report wherein the report recites the presence of an element in the periodic table wherein said composition has not been in contact with said element". At page 2 of the instant specification, applicant states:

> The present invention relates to a new composition of matter comprised of 'p', 'd', and/or 'f' atomic orbitals, and a new process for making the composition of matter. This new composition of matter can be distinguished by a change in energy, electronic properties, physical properties, and the like.

Applicant then defines the terms "zurn" and "isozurn" to characterize a change or shift in electronic structure of matter (page 29 of specification). A composition "characterized by a calibrated Uniquant analysis report wherein the report recites the presence of an element in the periodic table wherein said composition has not been in contact with said element" would have new energy states that are different from conventionally accepted states of energy. It is clear from known principles of physics and chemistry that the instant compositions cannot exist according to conventional scientific theory.

Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not enable one of ordinary skill in the art to make or use a composition of matter that is distinguishable from its naturally occurring state, in that it would require undue experimentation to do so. Factors to be considered in determining whether a disclosure would require undue experimentation include, (1) the breadth of the claims, (2) the nature of the invention, (3) the state of the prior art, (4) the level of one of ordinary skill, (5) the level of

predictability in the art, (6) the amount of direction provided by the inventor, (7) the existence of working examples and (8) the quantity of experimentation needed to make or use the invention based on the content of the disclosure. In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

(1) the breadth of the claims

Sine all of the claims require a composition "characterized by a calibrated Uniquant analysis report wherein the report recites the presence of an element in the periodic table wherein said composition has not been in contact with said element", and it has been shown hereinbefore with respect to the rejection under 35 U.S.C. 101 for inoperability that such cannot exist, the claims are not enabled. The question of whether a specification provides an enabling disclosure under 35 U.S.C. .112, first paragraph, and whether an application satisfies the utility requirement of 101 are closely related. Process Control Corp. v. HydReclaim Corp., 190 F.3d 1350, 1358, 52 USPQ2d 1029, 1034 (Fed. Cir. 1999). To satisfy the enablement requirement of .112, first paragraph, a patent application must adequately disclose the claimed invention so as to enable a person skilled in the art to practice the invention at the time the application was filed without undue experimentation. Enzo Biochem, Inc. v. Calgene, Inc., 188 F.3d 1362, 1371-72, 52 USPQ2d 1129, 1136

(Fed. Cir. 1999). The utility requirement of 101 mandates that the invention be operable to achieve useful results. Brooktree Corp v. Advanced Micro Devices, Inc., 977 F.2d 1555, 1571, 24 USPQ2d 1401, 1412 (Fed. Cir. 1992). Thus, if the claims in an application fail to meet the utility requirement because the invention is inoperative, they also fail to meet the enablement requirement because a person skill in the art cannot practice the invention. Process Control, 190 F.3d at 1358, 52 USPQ2d at 1034.

(2) the nature of the invention

The scientific community has held the belief that matter cannot exist in energy states other than those known in nature. Accordingly, the nature of the invention is such that it would be startling if it were operative, thus requiring greater detail and guidance than that found in the instant specification to provide enablement.

(3) the state of the prior art

There appears to be no prior art showing compositions characterized by a calibrated Uniquant analysis report wherein the report recites the presence of an element in the periodic table wherein said composition has not been in contact with said element wherein the underlying electronic structure of mass or

matter containing a "p", "d", and/or "f" atomic orbital has been altered.

(4) the level of one of ordinary skill

Since even the most highly skilled physicists would agree that, according to conventional theory, there cannot exist compositions characterized by a calibrated Uniquant analysis report wherein the report recites the presence of an element in the periodic table wherein said composition has not been in contact with said element, the threshold of enablement is not met on pages 1-113 of the instant specification.

(5) the level of predictability in the art

It would be most unpredictable that compositions characterized by a calibrated Uniquant analysis report wherein the report recites the presence of an element in the periodic table wherein said composition has not been in contact with said element may be produced. (See the reasoning presented hereinbefore with respect to the rejection under 35 U.S.C. 101 for inoperability.

(6) the amount of direction provided by the inventor

It is the examiner's position that applicant has not provided sufficient guidance throughout the specification to enable one of ordinary skill in the art to make and use the instant invention. The instant specification is devoid of

direction and guidance necessary to enable the skilled artisan to modify any or every of these properties. Applicant has not set forth any steps or measures which would allow one of ordinary skill to select one of these properties, and modify such by modification of a species zurn. It is the examiner's position that long and tedious trail and error would await any person skilled in the art reading applicant's specification and attempting to modify a composition from it's naturally occurring state.

(7) the existence of working examples

The quantum of proof required to establish enablement is inextricably linked with the degree of unpredictability of the relevant art. In the instant specification, applicant has not specifically disclosed any working example. It does appear that applicant alludes to compositions characterized by a calibrated Uniquant analysis report wherein the report recites the presence of an element in the periodic table wherein said composition has not been in contact with said element in several of the Figures. However, no actual description of the examples appears in the specification.

(8) the quantity of experimentation needed to make or use the invention

The instant description of "Uniquant analysis report" does not enable the skilled artisan to make and/or use the claimed invention. Applicant's description of "Uniquant reports" at pages 22-23 and Table 5 is noted. However, it cannot be determined if different data would result from a different version of the software. The "predictability or lack thereof" in the art refers to the ability of one skilled in the art to extrapolate the disclosed or known results to the claimed invention. If one skilled in the art can readily anticipate the effect of a change within the subject matter to which the claimed invention pertains, then there is predictability in the art. On the other hand, if one skilled in the art cannot readily anticipate the effect of a change within the subject matter to which that claimed invention pertains, then there is lack of predictability in the art. Accordingly, what is known in the art provides evidence as to the question of predictability. In particular, the court in In re Marzocchi, 439 F.2d 220, 223-24, 169 USPQ 367, 369-70 (CCPA 1971), stated:

> [I]n the field of chemistry generally, there may be times when the well-known unpredictability of chemical reactions will alone be enough to create a reasonable doubt as to the accuracy of a particular broad statement put forward as enabling support for a claim. This will especially be the case where the statement is, on its face, contrary to generally accepted scientific principles. Most often, additional factors, such as the teachings in pertinent

> references, will be available to substantiate any doubts that the asserted scope of objective enablement is in fact commensurate with the scope of protection sought and to support any demands based thereon for proof. [Footnote omitted.]

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The instant claims are indefinite in the use of "Uniquant analysis report".

If the trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of the 35 U.S.C. 112, second paragraph. Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Kopec
Primary Examiner
Art Unit 1751

MK
April 18, 2005